



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10**

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MAR 10 2015

OFFICE OF  
COMPLIANCE AND  
ENFORCEMENT

Reply to: OCE-184

Brian Anderson  
Program Manager  
The Boeing Company  
M/C 1W-12  
P.O. Box 3707  
Seattle, Washington 98124-2207

Re: Risk-based Disposal Approval for the Duwamish Sediment Other Area and Southwest Bank  
Corrective Measure and Habitat Project Boeing Plant 2, 2014-2016 Sediments Work Elements,  
Construction Season 3, Seattle, Washington – Demobilization Amendments  
TSCA ID No. WAD 00925 6819

Dear Mr. Anderson:

This letter constitutes a modification to the existing risk-based disposal approval (RBDA) (Reference 1) under the authority of 40 Code of Federal Regulations (C.F.R.) § 761.61(c) for the cleanup, associated verification sampling and analysis, storage and disposal of certain polychlorinated biphenyl (PCB) remediation waste at The Boeing Company (Boeing) Plant 2 facility in Seattle, Washington. More specifically, this modification revises Condition 7 of the existing approval to incorporate a work plan for decontamination and demobilization of the infrastructure associated with the Plant 2 cleanup, and to make certain conforming changes related to management and disposal of aqueous decontamination liquids.

### **Background**

The existing approval for this project (Reference 1) contained basic requirements for decontamination or disposal of equipment and structures associated with completion of sediment and soil cleanup associated with the approval. As work progressed towards its planned completion, Boeing and EPA recognized that it would be helpful to have a more specific plan in place for conducting activities associated with project demobilization. To this end, Boeing provided EPA with a written work plan (Reference 2). After review of the initial submission, EPA provided comments on the plan (Reference 3). Boeing provided a revised version of the work plan on March 4, 2015 (Reference 4).

### **Discussion**

EPA has reviewed Boeing's demobilization work plan (Reference 4), and has determined that decontamination and demobilization of equipment and structures according to the work plan will not pose an unreasonable risk of injury to health or the environment. To ensure full integration of the RBDA with the demobilization work plan, EPA is revising Condition 7 of the RBDA (Reference 1) to read as follows:

7. All equipment and structures that have been in contact with liquid or non-liquid PCB remediation waste subject to this approval must be disposed of or decontaminated following completion of construction and cleanup work under this approval, following the general approach and particular requirements in the document "Boeing Plant 2 DSOA Corrective Measure and Habitat Project Demobilization: South Shoreline," dated February, 2015 ("demobilization work plan), and incorporated herein by reference. All disposable equipment or materials must be disposed of in a facility permitted, licensed or registered by a State to manage municipal solid waste subject to 40 C.F.R. Part 258, or municipal non-hazardous waste subject to 40 C.F.R. §§ 257.5 through 257.30, as applicable. Non-disposable equipment and structures identified in the demobilization work plan must be decontaminated as documented in the work plan. Any other non-disposable equipment and structures must be decontaminated using mechanical means or pressure washing to achieve a "clean debris surface" as defined in 40 C.F.R. § 268.45, Table 1, footnote 3. Water generated from decontamination activities that does not contain decontamination chemicals or surfactants may be managed in the dredge return water treatment system. Water generated from decontamination activities that does contain decontamination chemicals or surfactants must be transported to the Transload facility or the North Boeing Field wastewater treatment system for pretreatment and discharge to the King County Publically Owned Treatment Works (POTW). The first batch of any water from decontamination activities sent to the Transload facility or to the North Boeing Field wastewater treatment system must be stored after treatment and prior to discharge to allow direct sampling to verify compliance with King County discharge limits. Boeing will provide EPA with results of such sampling prior to discharge of the treated decontamination water.

Boeing must conduct all sampling and analysis documented in the demobilization work plan according to a written sampling and analysis plan that includes a quality assurance project plan. Results of all decontamination and demobilization sampling and analysis must be documented in the closeout summary report required by Condition 2.

Boeing will ensure that any decontamination conducted pursuant to this approval will be conducted in compliance with the requirements of 40 C.F.R. § 761.79(e)-(g).

EPA is establishing this modified Condition 7 under the authority of 40 C.F.R. § 761.61(c), based on the finding of no unreasonable risk noted above.

EPA has revised the requirements of Condition 7 from those in the original RBDA to better reflect the current status and availability of the Dredge Water Return System (DWRS), and to better align the condition with available options. During the demobilization process, the DWRS is being operated at reduced capacity to focus on draw-down of water remaining in the settling basin. For this reason, Boeing has proposed limiting use of the DWRS only to decontamination water that does not contain added chemicals or surfactants. Other decontamination water which may contain chemicals or surfactants, such as proposed for decontamination of the Tri-Flow unit, will be transported to the Transload facility or the North Boeing Field wastewater treatment system for treatment and discharge to the King County POTW. To verify that added chemicals or surfactants do not adversely affect the ability of the Transload water treatment process to effectively remove PCBs, particularly those associated with small soil or sediment particles, EPA is including a requirement to conduct direct sampling of the first batch of treated decontamination water prior to discharge to verify the efficacy of treatment. This requirement applies independently to each of the two facilities.


This approval and the EPA's evaluation of the project under the Toxic Substance Control Act (TSCA) is wholly contingent upon EPA written approval of all phases and aspects of the project pursuant to the Resource Conservation and Recovery Act (RCRA) corrective action Administrative Order on Consent, EPA Docket No. 1092-01-22-3008(h) (Boeing Order, Reference 5).

This modification of the existing approval is issued to Boeing, the owner and operator of the Plant 2 facility, who has overall responsibility for implementation of this authorized work. This project will involve certain activities at facilities within EPA Region 10 other than those owned or operated by Boeing. This approval is not issued to any of the owners or operators of these off-site facilities. The approval does, however, include consideration of how PCB remediation waste subject to this approval will be decontaminated, transported, and disposed of to ensure that work subject to this approval satisfies the standard of no unreasonable risk of injury to health or the environment at 40 C.F.R. § 761.61(c)(2).

This written decision for a modification of the previously approved risk-based method for cleanup, storage, and disposal of PCB remediation waste is based on Boeing's submission of March 4, 2015 (Reference 4). This submission is considered incorporated by reference into the existing approval. In granting this approval, EPA finds that the proposed cleanup and verification of PCB remediation waste, subject to the conditions in the existing approval and Condition 7 as modified by this approval will not pose an unreasonable risk of injury to health or the environment. Boeing shall ensure that activities conducted pursuant to this approval are in full compliance with conditions of the approval. The terms and conditions of this approval as modified are established pursuant to 40 C.F.R. § 761.61(c) and enforceable under the Toxic Substances Control Act (TSCA). Any actions which deviate from the terms and conditions of this approval may result in administrative, civil, or criminal enforcement in accordance with Sections 16 and 17 of TSCA, 15 U.S.C. §§ 2615 and 2616.

Should you have any questions or comments, please contact Dave Bartus at (206) 553-2804, or [Bartus.dave@epa.gov](mailto:Bartus.dave@epa.gov).

Sincerely,



Edward J. Kowalski  
Director

Enclosure

cc: Will Ernst, The Boeing Company  
Hideo Fujita, Ecology Northwest Regional Office  
Jim Sifford, King County Industrial Waste Program  
Peggy Rice, King County Industrial Waste Program  
Heather Trim, People for Puget Sound  
Glen St. Amant, Muckleshoot Tribe  
John Wakeman, U.S. Army Corps of Engineers  
Olivia Romano, U.S. Army Corps of Engineers

## **References**

- 1) Letter, "Risk-based Disposal Approval for the Duwamish Sediment Other Area and Southwest Bank Corrective Measure and Habitat Project Boeing Plant 2, 2014-2016 Sediments Work Elements, Construction Season 3, Seattle, Washington - First Modification, TSCA ID No. WAD 00925 6819," Edward J. Kowalski, EPA to Brian Anderson, The Boeing Company, dated October 23, 2014.
- 2) E-mail, "FW: Demob Documents," from Brian Anderson, The Boeing Company to Dave Bartus and Melissa Blankenship, EPA, dated Thursday, February 12, 2015
- 3) E-mail, "RE: Demob Documents," Dave Bartus, EPA, to Brian Anderson, The Boeing Company, Robb Webb, Dalton, Olmsted & Fuglevand and Melissa Blankenship, EPA, dated 2/27/2015
- 4) E-mail, "Fw: Final decon plan," Brian D. Anderson, The Boeing Company, to Dave Bartus, EPA, dated March 4, 2015, with attachment.
- 5) Resource Conservation and Recovery Act (RCRA) Administrative Order on Consent, EPA Docket No. 1092-01-22-3008(h).